INNOVATORS GUIDE

Steps and Resources to Help You with the Innovation Process



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INNOVATORS GUIDE

- ▶ Do you have an innovative concept or product?
- ▶ Are you trying to achieve commercial success for it?

Montana state service providers get many requests for assistance from independent inventors and small businesses with new concepts they hope will succeed in the marketplace. Service resources are very limited and each organization can provide assistance only in their area of primary focus. Therefore, before you can expect others to invest time or money in your concept, it is critically important that you take steps to:

- protect and develop your concept or product
- educate yourself about the innovation process
- learn if your innovation is feasible to achieve sales in the proposed market

This simple Innovator's Guide is in no way comprehensive, and you will want to dig more deeply into the resources referenced. Please understand clearly that Montana service organizations are NOT in the business of helping companies to find investors. At times, they can connect you to financial opportunities; however, be prepared - the application processes are highly competitive and require excellent writing skills.

Yours may well be among the small percentage of ideas that become successful. Or, your inventing may be nothing more than a fun and satisfying hobby. In either case, the information provided here will guide you in critical steps of innovation and commercialization.

Montana Technology Innovation Partnership MT Dept of Commerce P.O. Box 200505 Helena, MT 59620 www.mtip.mt.gov

GENERAL CONTENTS

- Confidentiality what, why and how
- Maintaining good invention records
- Evaluating the innovation
- Patenting basics and steps to take
- Resources
 - Library services for patent and market searching
 - Suggested books and online links
 - Patent counsel and business resources

CONFIDENTIALITY

It is important you don't share details about your invention publicly. This isn't just to prevent someone from stealing your idea. When you "disclose" your invention, or make it "public," it starts a grace period in which you have one year to file a patent application, or you lose your right to monopolize the idea. Making an invention public might be something obvious like telling a crowd of friends at the coffee shop how to build and use your product. Or, it might be less obvious like making a prototype and using it for your work on a commercial job.

At times, it is necessary to discuss details of the invention in order to market it or advance the development process. In those situations, ask the other party to sign a Confidentiality Agreement (also known as a Non-Disclosure Agreement). You can find sample agreements by searching online or by requesting a template from your patent attorney (a patent agent may not provide you with legal agreements).

The best behavior is to share the 'enabling' details (those details that would allow someone moderately skilled in the field to practice your invention) ONLY with those parties who absolutely must have that information to interact with you. It is not necessary to reveal enabling details in order to provide significant information to another party. Non-confidential information can include the type of product, the problem to be solved, the industry and market sectors, and the many benefits of your invention.

Take efforts to learn how to talk about your invention non-confidentially while keeping patentable information to yourself until the patent is filed. Develop a simple one-page technology brief or brochure to identify what you can reveal non-confidentially. Add a graphic that allows the reader to quickly understand your field of interest without seeing your invention. In addition to disciplining yourself in how to speak about your innovation, this print piece will allow you to rapidly introduce your concept to service providers and others.

MAINTAINING GOOD INVENTION RECORDS

If you ever expect to make money from your innovation, you need to think and act like a business person. Keep good files and records on all of your efforts. Most countries give credit for an invention to the first person to file a patent on it. However in the United States, legal rights go to the "first to invent." This means that your records can be used to establish your claim to an invention.

One way to do this is by keeping current in an inventor's logbook. Following are tips on how to maintain a logbook that if needed, could provide good legal evidence for your claim to an invention (*developed by the Technical Assistance Center at the University of Nebraska*):

- 1. Keep one logbook for each active invention, and date every entry.
- 2. Keep records of telephone calls, names and addresses of important contacts.
- 3. It is poor practice to rely on a busy person's memory. Identify every entry as to its purpose and intent.
- 4. Avoid using scrap paper, backs of envelopes, and blank tablets for recording ideas. Put all thoughts, notes, and technical doodles in the logbook.

- 5. Entries must be arranged in chronological order on successive pages. Do not skip pages, planning to fill them in later. Pages are numbered and sewn in the binding to help prevent someone from tampering with your logbook.
- 6. Cross out unused spaces on pages to prevent later entries under an earlier date. This will add to the validity of the information in the logbook.
- 7. If it is necessary to add a note to a prior entry, indicate it by placing it in the margin and dating it so that it cannot be misunderstood as an attempt to falsify records.
- 8. Indicate the person working with you in connection with each entry. If someone else makes an entry in the logbook, they should date and sign the entry to identify it as theirs.
- 9. Use lots of sketches to record ideas, designs, circuits, diagrams, and test equipment setups.
- 10. Engineering drawings and large sketches must be noted in your logbook by reference: number, title, date, and short description of what the drawing portrays.
- 11. Glue or tape copies of small drawings, notes, clippings, photos, receipts for materials, equipment, or labor in the inventor's logbook. Also, such items as memos, letters, progress reports, or other important material may be added.
- 12. Once an idea has been fully described and illustrated in the inventor's logbook, it should be explained to a suitable witness—one who will not receive any financial gain.
- 13. The witness should write out at the bottom of each page: "The confidential (invention name) explained to me" or "The confidential (invention name) read and understood by me," witness signature, date.
- 14. Laboratory experiments or tests should be described and recorded in detail.
- 15. The first "reduction to practice" which is the first operation of a prototype or model should be demonstrated to a witness who understands it. The witness should state in the logbook: "Operations and results observed of the (invention)," witness signature, date.
- 16. Protect your intellectual property logbook by storing it in a safe place, such as a safe, safety deposit box, or locked desk.

EVALUATING THE INNOVATION

It is highly recommended that you collect information before incurring the costs of prototyping, patenting, and marketing your innovation. It is critical that you make every effort to evaluate the feasibility of your invention from many different perspectives including:

- Legality
- Safety
- Impact on society
- Performance
- Profitability
- Market demand
- Size of market
- Product-line potential
- Manufacturing feasibility
- Distribution channels

- Competition and bordering products
- Competitive advantages and disadvantages
- Consumer appeal
- Licensing potential
- Major barriers toward market or manufacturer acceptance

There is a simple, self-administered evaluation test at this website: www.uspatentlaw.com/evaluation.htm. Below are details about two university-based innovation assessment services that can provide an objective third-party evaluation of your invention.

BE AWARE that the results you get from evaluations by service providers are only as good as the input you provide. If you don't have a strong basis for an answer, collect more information before requesting feedback. You are likely to invest vast quantities of personal time and thousands of dollars, in your invention. It is important to approach the process knowledgeably and with high-quality outside feedback.

WASHINGTON STATE UNIVERSITY INNOVATION ASSESSMENT CENTER www.business.wsu.edu/organizations/iac/Pages/index.aspx

The Innovation Assessment Center assists independent inventors and owners of small businesses. The focus is on helping them understand the innovation process and determine the potential for commercial success of new products, processes, or services.

The Center allows people to obtain inexpensive, but comprehensive, evaluation of their new products or services to help them decide whether to invest more energy and money into their ideas. A full evaluation of your innovation costs \$795. This price includes preliminary market research, a key word patent search, and a feasibility analysis. In addition to a professional evaluation, you will receive an educational packet which includes *Tips and Traps for Inventors* and *Marketing Your Invention*.

An innovator completes a confidential registration and disclosure document. The invention is then reviewed by not fewer than three individuals with relevant expertise on 33 criteria. A printout of the detailed computer analysis and evaluators' specific comments are sent to the inventor. In addition, the Center provides counseling regarding developing a business plan and other aspects of bringing promising products to market. Cost for these additional services range from free to several thousands of dollars depending upon the arrangements with the individual or company.

The Innovation Assessment Center 442 Todd Hall PO Box 644750 Pullman, WA USA 99164-4750 (509) 335-7876

UNIVERSITY OF WISCONSIN INNOVATION SERVICE CENTER

http://academics.uww.edu/business/innovate/

The Wisconsin Innovation Service Center (WISC) helps manufacturing clients from across the U.S. with new product and market decisions. WISC provides small businesses with early-stage technical and market feasibility assessments of new product and service ideas, as well as with investigating market expansion opportunities. Their researchers use an extensive array of resources to gather information on market size, competitive intensity, existing patents, and demand trends, permitting clients to make well-informed decisions on the further development of projects or markets.

WISC's unique competence lies in access to a network, built up over the years, of technical and specialized consultants with a variety of expertise, as well as maintenance of an in-house staff capable of performing quality secondary market research. Since 1980, WISC has served thousands of clients, from across the U.S. and several foreign countries.

WISC charges an \$895 flat fee for a basic report. Higher fees are quoted for more in-depth projects. Somewhat lower fees are sometimes available for clients with less than \$1 million in sales.

Wisconsin Innovation Service Center 402 McCutchan Hall University of Wisconsin—Whitewater Whitewater, WI 53190 (262) 472-1365 innovate@uww.edu

PATENTING BASICS

A patent is a government grant given only to the inventor or discoverer of a new and useful process, machine, article of manufacture, or composition of matter. To be patentable, an invention must be:

- Novel (not previously known, or described in a publication);
- Useful (incorporates a useful purpose and is not frivolous or immoral); and
- Non-obvious (not obvious to a person with ordinary skill in the relevant area of knowledge).

A patent cannot be obtained on an abstract idea, a law of nature, or a natural phenomenon. The invention must be set forth in all the detail that would allow it to be duplicated by a person with ordinary skill in that field. A patent grants the owner a monopoly on that invention, with rights to exclude all others from making, using, or selling the invention for approximately 20 years.

A patent will not be granted if (among other things) the invention was already patented, it was described in a printed publication anywhere else in the world, the invention was made available for public use or sale in the U.S. prior to the 12 months before filing, or

the inventor's application for a patent in another country was granted before the filing date of the U.S. application.

A preliminary patentability search is important to determining whether an invention is novel and to aid registered patent counsel or the inventor, in drafting the patent application. The government thoroughly examines for patentability. Present backlogs in the U.S. Patent and Trademark Office (USPTO) may prevent examination of a new patent application for 24 to 30 months. Therefore, it may take several years before a patent is issued.

A Provisional Patent Application (PPA) allows an inventor to claim "patent pending" status for the invention for 12 months, but involves less work and cost than a Regular Patent Application. A PPA allows the inventor a year to develop and market the invention under patent-pending protection. For far less than the full price of a U.S. Regular (Non-Provisional) patent, you can establish proof of your claim while continuing to determine whether your invention is worth pursuing. By the end of the year, you must decide whether to file the U.S. Regular Patent Application.

The World Intellectual Property Organization
distributes a FREE handbook about the patenting process.

"Inventing the Future" is written in easy-to-read language and can be found at:
http://www.wipo.int/freepublications/en/sme/917/wipo_pub_917.pdf

Another very informative base point for patent information is the US Patent and Trademark (USPTO) website (www.uspto.gov/main/patents.htm). The USPTO Inventor Resources page was developed to provide instructions for new inventors (www.uspto.gov/web/offices/com/iip/index.htm). The Inventor Resources include many free brochures. Patent Application and Disclosure Document Program details are listed, along with other important resources and information. General information may be requested by calling the USPTO at (800) 786-9199.

Some basic information can be found in a booklet published by the USPTO titled "General Information Concerning Patents." It may be obtained for a nominal charge by calling or writing for Stock Number 003-004-00641-2 to:

U.S. Governmental Printing Office Superintendent of Documents Washington, DC 20402-9325 Telephone (202) 512-1800

STEPS TO OBTAIN A PATENT

Following are the typical steps in pursuing a patent:

- 1. Look for similar products in stores and on the Internet to develop an understanding of the market opportunity or need for your invention.
- 2. Review publications, articles, and technical literature to find out how the problem you have identified is currently being solved. Become knowledgeable

- about the problem, and the estimated costs of your solution as opposed to those already available.
- Do an initial search online at www.uspto.gov/patft/index.html, or by going to a Patent Depository Library, or by hiring a qualified search agent (most easily located through a patent attorney or agent).
- Arrange a first consultation with a patent attorney or a patent agent qualified in your field of inventing and with whom you can communicate well. This individual must be registered with the USPTO, which you can verify by searching at https://oedci.uspto.gov/OEDCI/.
- 5. Clearly understand the costs and expectations of patent counsel before deciding on a patent strategy and making a deposit for services.
- 6. Prepare an invention disclosure and application interactively with patent counsel.
- 7. Cooperate with your patent counsel on a professional patent search (if needed), forms completion, and the creation of patent-ready illustrations.
- 8. File the application the filing makes your invention "patent pending."
- 9. Work with your patent counsel to respond to the patent examiner's 'Office Action' in which your claims are allowed, disallowed, or challenged.
- 10. Be patient today's patent process moves slowly and may require 2 years or more before an examiner looks at your application. There may be multiple Patent Office actions until the patent is in a form that can be allowed for issuance.

REFERENCE SERVICES IN THE STATE OF MONTANA

THE LIBRARY AT MONTANA TECH

The library at the Montana College of Mineral Science and Technology (Montana Tech) at Butte is a U.S. Patent Depository Library. Through it, you can access descriptions of over four million U.S. patents and gain easy access to full patents back to 1959. Reference personnel at the library will help you initiate a search to find out if an invention is unique. However, you should be prepared to spend many hours, perhaps a couple days, reviewing descriptions in the related categories. This effort may save hundreds of dollars. For more information, call the library at (406) 496-4281 or visit it online at www.mtech.edu/library/

THE LIBRARY AT MONTANA STATE UNIVERSITY-BOZEMAN

Reference personnel at Renne Library, MSU-Bozeman will help you initiate a patent search. Library personnel also have search access to over 450 electronic databases, including patent databases, as well as access to other commercial online systems. Handouts that explain the service and fees are available at the library. Online commercial search request forms are also available at the library and in electric format for those with Internet access: www.lib.montana.edu/ref/. For more search information, call (406) 994-3171.

THE LIBRARY AT UNIVERSITY OF MONTANA, MISSOULA

The Maureen and Mike Mansfield Library offers patent-search features similar to those at MSU-Bozeman. This library also carries the Official Gazette, which contains abstracts of patents. For more information contact the Document Division at (406) 243-6866 or (800)240-4939, or online at www.lib.umt.edu.

PAMPHLETS AND BOOKS

The following are valuable self-help reference guides that can be ordered from Nolo Press, Berkeley, CA, at (800)728-3555 or online (www.nolo.com):

Hitchcock, David, <u>Patent Searching Made Easy</u>. [How to do patent searches on the Internet and in the library.]

Nolo Press, <u>Nolo's Patents for Beginners</u>. [A basic reference primer for first time inventors.]

Pressman, David (Patent Attorney), <u>Patent It Yourself</u>. [Excellent basic resource to understand the innovation process, including how to get started, maintaining an invention log, licensing, attracting investors, the forms and instructions necessary to patent your invention in the U.S. and more.]

Stim, Richard and Pressman, David, <u>Patent Pending in 24 Hours</u>. [The forms and information for filing a provisional patent application with the USPTO.]

Stim, Richard, <u>License Your Invention</u>. [Practical marketing advice and the legal licensing language you need to license your invention.]

ONLINE INVENTOR RESOURCES

| US Copyright Office | www.copyright.gov | | |
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| Copyright Website | http://www.benedict.com/info/info.aspx | | |
| US Patent & Trademark Office | www.uspto.gov | | |
| World International Patent Organization | www.wipo.org | | |
| Check out their resource section | | | |
| Print resources | | | |
| Great Idea Gear - A Montana online bookstore for innovators | www.greatideagear.com | | |
| Inventors Digest - the only U.S. inventors magazine | www.inventorsdigest.com | | |
| | [Subscriptions: (800) 838-8808] | | |
| Inventor Organizations | | | |
| National Inventors Association | www.uiausa.org | | |
| American Society of Inventors | www.americaninventor.org | | |
| Other Inventor Information | www.patentcafe.com | | |
| | www.inventorfraud.com | | |
| | www.webpatent.com | | |
| Invention Promotion Industry | www.uspto.gov/web/offices/com/iip/complaints.htm | | |
| Complaints and information | www.ftc.gov/bcp/menus/consumer/data/privacy.shtm | | |
| | www.ftc.gov/bcp/edu/pubs/consumer/products/pro21.shtm | | |

Additional inventor resources can be found at the MTIP website: www.sbir.mt.gov/default.mcpx

USEFUL CONTACT INFORMATION FOR MONTANA INVENTORS

SMALL BUSINESS ASSISTANCE

U.S. Small Business Administration Federal Building 301 South Park Helena, MT 59626-0054 (406) 441-1081

www.sba.gov and http://sbdc.mt.gov/

Starting, managing, and financing your small business.

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